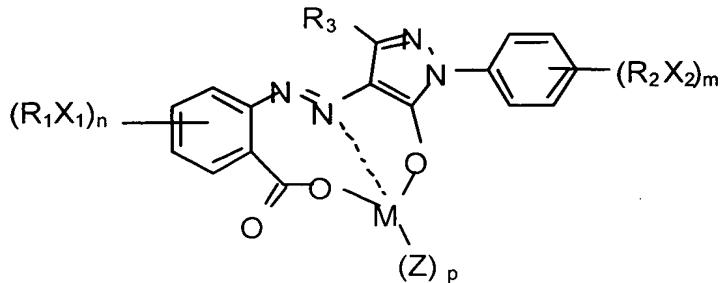


What Is Claimed Is:

1. A printing ink composition comprising a metal-complexed dye represented by the formula

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or a salt thereof

wherein:

15 M is a metal;

R₁ and R₂ each independently is a solubilizing group;

R₃ is selected from the group consisting of:

(1) alkyl;

(2) cyano;

20 (3) COOH; and

(4) CONH₂;

X₁ and X₂ each independently is a counterion;

Z is a ligand;

n is an integer of from 1 to 3;

25 m is an integer of from 1 to 3; and

p is an integer of from 1 to 3;

dissolved or dispersed in a liquid carrier.

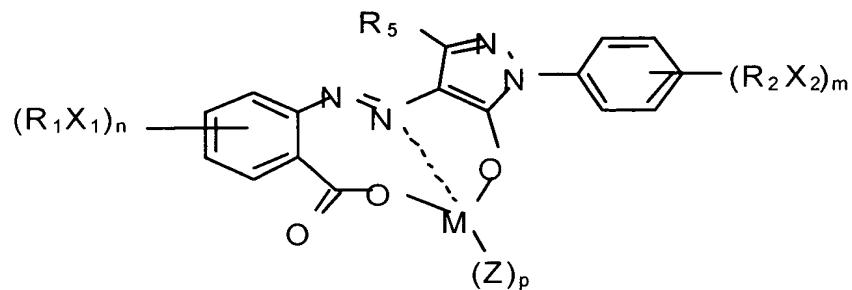
2. The printing ink composition according to Claim 1 wherein said liquid carrier comprises water.

3. The printing ink composition according to Claim 1 wherein M is copper.

4. The printing ink composition according to Claim 1, wherein at least one of X_1 and X_2 is an alkali metal ion.

5. The printing ink composition according to Claim 1 which includes a dye represented by the formula

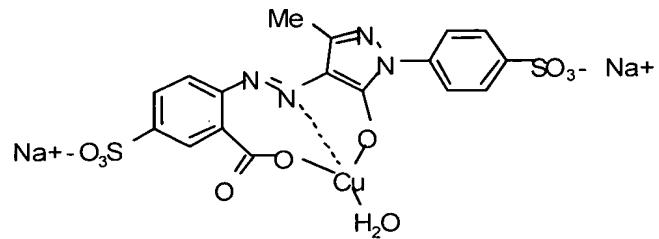
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wherein R₅ is alkyl and M, R₁, R₂, X₁, X₂, Z, m, n and p are as defined in claim 1.

6. The printing ink composition according to Claim 1 which includes a dye represented by the formula

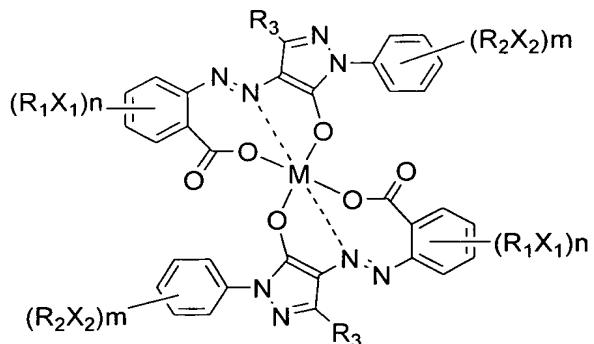
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7. An ink jet ink comprising a solution of a dye according to Claim 1 in water, aqueous alcohol or an aqueous glycol.

8. A printing ink composition comprising a metal-complexed dye represented by the formula



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wherein:

M is a metal;

R₁ and R₂ each independently is a solubilizing group;

R₃ is selected from the group consisting of:

- 10 (5) alkyl;
(6) cyano;
(7) COOH; and
(8) CONH₂;

X₁ and X₂ each independently is a counterion;

15 n is an integer of from 1 to 3; and

m is an integer of from 1 to 3;

dissolved or dispersed in a liquid carrier.

9. The printing ink composition according to Claim 8 wherein said liquid carrier comprises water.

10. The printing ink composition according to Claim 8 wherein M is copper.

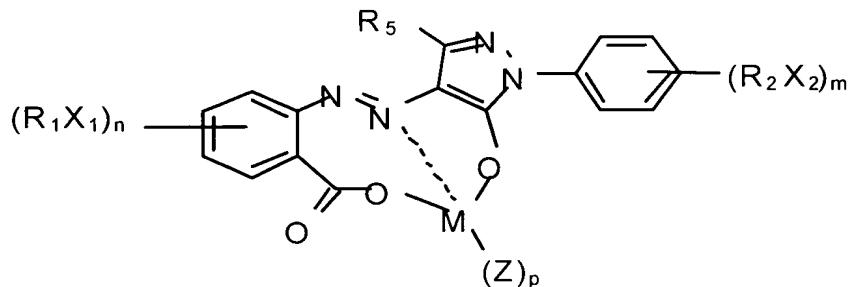
11. The printing ink composition according to Claim 8 wherein at least one of X₁ and X₂ is an alkali metal ion.

12. An ink jet cartridge comprising a housing having walls defining a reservoir and an outlet opening, the cartridge containing an ink jet ink according to Claims 1 or 8.

13. An ink jet printing method comprising forming a plurality of drops of an ink composition, and directing said drops onto an ink receptive material to form an image thereon, wherein said ink composition is according to Claims 1 or 8.

14. A metal-complexed dye represented by the formula

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where

M is a metal;

R₁ and R₂ each independently is a solubilizing group;

R₅ is alkyl;

15 X₁ and X₂ each independently is a counterion;

Z is a ligand;

n is an integer of from 1 to 3;

m is an integer of from 1 to 3; and

p is an integer of from 1 to 3.

15. A metal-complexed dye according to Claim 14 wherein R₅ is methyl.
16. A metal-complexed dye according to claim 15 wherein M is copper.